Leffingwell & Associates

Odor Properties & Molecular Visualization

Esters

DETECTION THRESHOLDS
&
Molecular Structures

Ethyl formate ...$C_3H_6O_2$
Odor Detection Threshold (in water) = 150,000 ppb
Ethereal, fruity, rum-like

Ethyl Acetate...$C_4H_8O_2$
Odor Detection Threshold (in water) = 5000 ppb
Ethereal, sharp, wine-brandy like odor

Ethyl propionate...$C_5H_{10}O_2$
Odor Detection Threshold (in water) = 10 ppb
Strong, ethereal, fruity, rum-like odor and taste

Ethyl butyrate...$C_6H_{12}O_2$
Odor Detection Threshold (in water) = 1 ppb
Ethereal, fruity odor; buttery, ripe fruit notes

Ethyl valerate...$C_7H_{14}O_2$
Odor Detection Threshold (in water) = 1.5 ppb
Strong, fruity, apple-like odor and taste

Ethyl hexanoate...$C_8H_{16}O_2$
Odor Detection Threshold (in water) = 1 ppb
Strong, fruity, winey odor; apple, banana, pineapple notes

Ethyl heptanoate...$C_9H_{18}O_2$
Odor Detection Threshold (in water) = 2.2 ppb
Strong, fruity, winey, cognac-like odor and taste

Ethyl octanoate...$C_{10}H_{20}O_2$
Flavor Detection Threshold (in water) = 15 ppb
Fruity, winey, sweet odor; cognac-apricot taste

Ethyl nonanoate...$C_{11}H_{22}O_2$
Odor Detection Threshold (in wine) = 850 ppb
Fatty, oily, cognac, nut-like odor; oily, fatty-fruity taste

Ethyl decanoate...$C_{12}H_{24}O_2$
Odor Detection Threshold (in wine) = 510 ppb
Sweet, fatty, nut-like, winey-cognac odor

Ethyl dodecanoate...$C_{14}H_{28}0_2$
Flavor Detection Threshold (in beer) = 2000 ppb
Oily, fatty, floral with fatty fruity taste

Ethyl myristate...$C_{16}H_{32}0_2$
Flavor Detection Threshold (in beerr) = 2000 ppb
Weak, fatty odor

Ethyl palmitate...$C_{18}H_{36}0_2$
Odor Detection Threshold (in water) = >2000 ppb
Faint, waxy, sweet odor; nearly tasteless; creamy mouthfeel

Data abstracted from Flavor-Base 98

Leffingwell & Associates

In the news

Home